a Schottky diode formed by contact between the first conductivity type semiconductor and a metal electrode,

wherein the semiconductor body is made of silicon carbide and includes a first conductivity type semiconductor substrate and a first conductivity type epitaxial growth layer formed on the first conductivity type semiconductor substrate,

wherein the field-effect transistor and the Schottky diode are arranged such that a first depletion layer stemming from the Schottky diode is superimposed on a second depletion layer spreading around the second conductivity type semiconductor in an off-state of the field-effect transistor.

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4. (Amended) The semiconductor element according to claim 1, wherein the field-effect transistor is an insulated gate field-effect transistor,

the insulated gate field-effect transistor further comprising:

a first conductivity type source region formed in the second conductivity type semiconductor, a recess that penetrates the source region and the second conductivity type semiconductor to reach the first conductivity type drift region, and a gate electrode on the insulating film formed in the recess,

wherein in the insulated gate field-effect transistor,

the second conductivity type semiconductor is provided on the first surface side; and

the source electrode is provided so as to be in contact with the second conductivity type semiconductor and the source region,

wherein the Schottky diode is formed by contact between the drift region in contact with the recess and the metal electrode.

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7. (Amended) The semiconductor element according to claim 1, wherein the silicon carbide is obtained by causing epitaxial growth on a surface of a silicon carbide substrate that is either one of the following I and II to form a silicon carbide layer:

I. (111) Si plane of β-SiC, (0001) Si plane of 6H or 4H-SiC, or Si plane of 15R-SiC, or offcut planes within 10 degrees of these Si planes; and

II. (100) plane of β-SiC, (110) plane of β-SiC, (1-100) plane of 6H or 4H-SiC, (11-20) plane of 6H or 4H-SiC, or offcut planes within 15 degrees of these planes.

8. (Amended) A semiconductor element comprising:

a field-effect transistor including a source electrode provided on a first surface side of a semiconductor body, a drain electrode provided on a second surface side opposite to the first surface side, a first conductivity type semiconductor that includes a first conductivity type drift region and is included in the semiconductor body, and a second conductivity type semiconductor included in the semiconductor body; and

a Schottky diode formed by contact between the first conductivity type semiconductor and a metal electrode,

wherein the semiconductor body is made of silicon carbide and includes a first conductivity type semiconductor substrate and a first conductivity type epitaxial growth layer formed on the first conductivity type semiconductor substrate,

wherein the field-effect transistor and the Schottky diode are arranged closely so that a second conductivity type semiconductor other than said second conductivity type semiconductor is not interposed between the field effect transistor and the Schottky diode.

11. (Amended) The semiconductor element according to claim 8, wherein the field-effect transistor is an insulated gate field-effect transistor,

the insulated gate field-effect transistor further comprising:

a first conductivity type source region formed in the second conductivity type semiconductor, a recess that penetrates the source region and the second conductivity type semiconductor to reach the first conductivity type drift region, and a gate electrode on the insulating film formed in the recess,

wherein in the insulated gate field-effect transistor,

the second conductivity type semiconductor is provided on the first surface side; and

the source electrode is provided so as to be in contact with the second conductivity type semiconductor and the source region,

contd A4 wherein the Schottky diode is formed by contact between the drift region in contact with the recess and the metal electrode.

Please add new claims 15-22 as follows:

15. (New) The semiconductor element according to claim 3, wherein, in an on-state of each of the insulated field-effect transistors, a channel extends along the thickness direction of the semiconductor body in the second conductivity type semiconductor, wherein the surface of the recess is covered with an insulating film.

A5 16. (New) The semiconductor element according to claim 4, wherein, in an on-state of the insulated field-effect transistor, a channel extends along the thickness direction of the semiconductor body in the second conductivity type semiconductor, wherein the surface of the recess is covered with an insulating film.

17. (New) The semiconductor element according to claim 10, wherein, in an on-state of each of the insulated field-effect transistors, a channel extends along the thickness direction of the semiconductor body in the second conductivity type semiconductor, wherein the surface of the recess is covered with an insulating film.

18. (New) The semiconductor element according to claim 11, wherein, in an on-state of the insulated field-effect transistor, a channel extends along the thickness direction of the semiconductor body in the second conductivity type semiconductor, wherein the surface of the recess is covered with an insulating film.

19. (New) The semiconductor element according to claim 1, wherein the first conductivity type is n-type and the second conductivity type is p-type.

20. (New) The semiconductor element according to claim 8, wherein the first conductivity type is n-type and the second conductivity type is p-type.

21. (New) A semiconductor element comprising:

a field-effect transistor including a source electrode provided on a first surface side of a semiconductor body, a drain electrode provided on a second surface side opposite to the first

surface side, a first conductivity type semiconductor that includes a first conductivity type drift region and is included in the semiconductor body, and a second conductivity type semiconductor included in the semiconductor body; and

a Schottky diode formed by contact between the first conductivity type semiconductor and a metal electrode,

wherein the field-effect transistor and the Schottky diode are arranged such that a first depletion layer stemming from the Schottky diode is superimposed on a second depletion layer spreading around the second conductivity type semiconductor in an off-state of the field-effect transistor,

wherein the field-effect transistor is a junction field-effect transistor,

the junction field-effect transistor further comprising:

a first conductivity type source region on the first surface side, and a gate electrode,

wherein in the junction field-effect transistor,

the source electrode is provided so as to be in contact with the source region; and

the gate electrode is provided so as to be in contact with the second conductivity type semiconductor,

wherein the Schottky diode is formed by contact between the first conductivity type drift region exposed on the first surface side and the metal electrode.

22. (New) A semiconductor element comprising:

a field-effect transistor including a source electrode provided on a first surface side of a semiconductor body, a drain electrode provided on a second surface side opposite to the first surface side, a first conductivity type semiconductor that includes a first conductivity type drift region and is included in the semiconductor body, and a second conductivity type semiconductor included in the semiconductor body; and

a Schottky diode formed by contact between the first conductivity type semiconductor and a metal electrode,

wherein the field-effect transistor and the Schottky diode are arranged closely so that a second conductivity type semiconductor other than said second conductivity type semiconductor is not interposed between the field effect transistor and the Schottky diode,

wherein the field-effect transistor is a junction field-effect transistor,

the junction field-effect transistor further comprising:

a first conductivity type source region on the first surface side, and a gate electrode,

wherein in the junction field-effect transistor,

the source electrode is provided so as to be in contact with the source region; and

the gate electrode is provided so as to be in contact with the second conductivity type semiconductor,

wherein the Schottky diode is formed by contact between the first conductivity type drift region exposed on the first surface side and the metal electrode.